Power Connectors

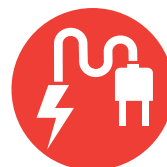## Industrial Connectivity Solutions

HIRSCHMANN
A **BELDEN** BRAND

lumbergautomation
A **BELDEN** BRAND

M12 Power Series
G/GO Series
CA Series
7/8" Series
ST Series
M23 Series
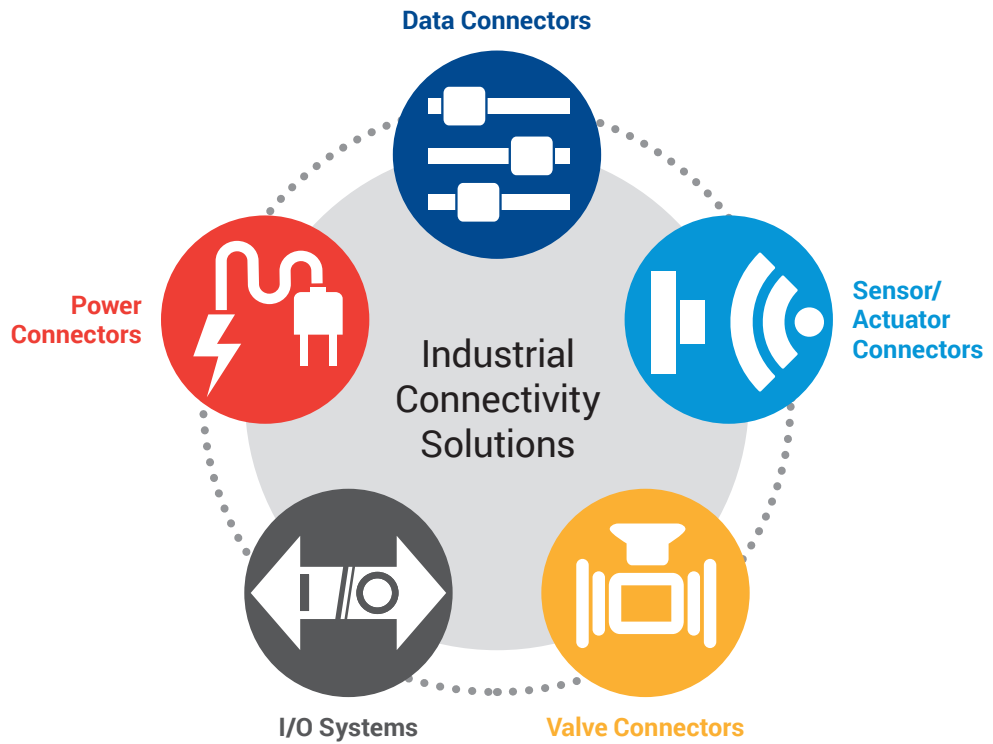Mini Power Series

Be certain.
Belden.

Industrial Connectivity Solutions from Belden

Founded in 1902, Belden's long-term proven solutions are in reliable operation worldwide. Our two leading brands – Hirschmann and Lumberg Automation – combine proven experience with innovation. And a focus on customer needs has made us the global leader in high-quality, end-to-end signal transmissions.

Developed with ease of use in mind, our industrial connectivity solutions are especially designed to stand up to surroundings characterized by dust, water and heavy vibrations.

Whether you want to transfer power, data, signals or all combined in the form of an intelligent I/O system, our diversified product range offers you the right solution for every application.

Data Connectors

Power Connectors

Industrial Connectivity Solutions

Sensor/ Actuator Connectors

I/O Systems

Valve Connectors

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Power Connectors

When it comes to electrical machinery, a reliable and consistent power supply is indispensable. The choice of an appropriate power connector depends on the nature of the application as well as on your specific requirements. Ranging from design diversity to specific standards and high-voltage versions, the Belden Power portfolio offers a broad, practical selection to fulfill your individual application objectives.

Table of Contents

Two Strong Brands for Your Needs

HIRSCHMANN
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Typical Applications

M12 Power Series T-coding

Miniaturized power connector for lighting applications like floodlights or hall lighting

ST Series

Long-term proven and developed for Building Automatization such as sun blinds and roller shutters

G/GO Series

Well-equipped for the power supply in extraordinary harsh and dusty applications, such as industrial drilling machines
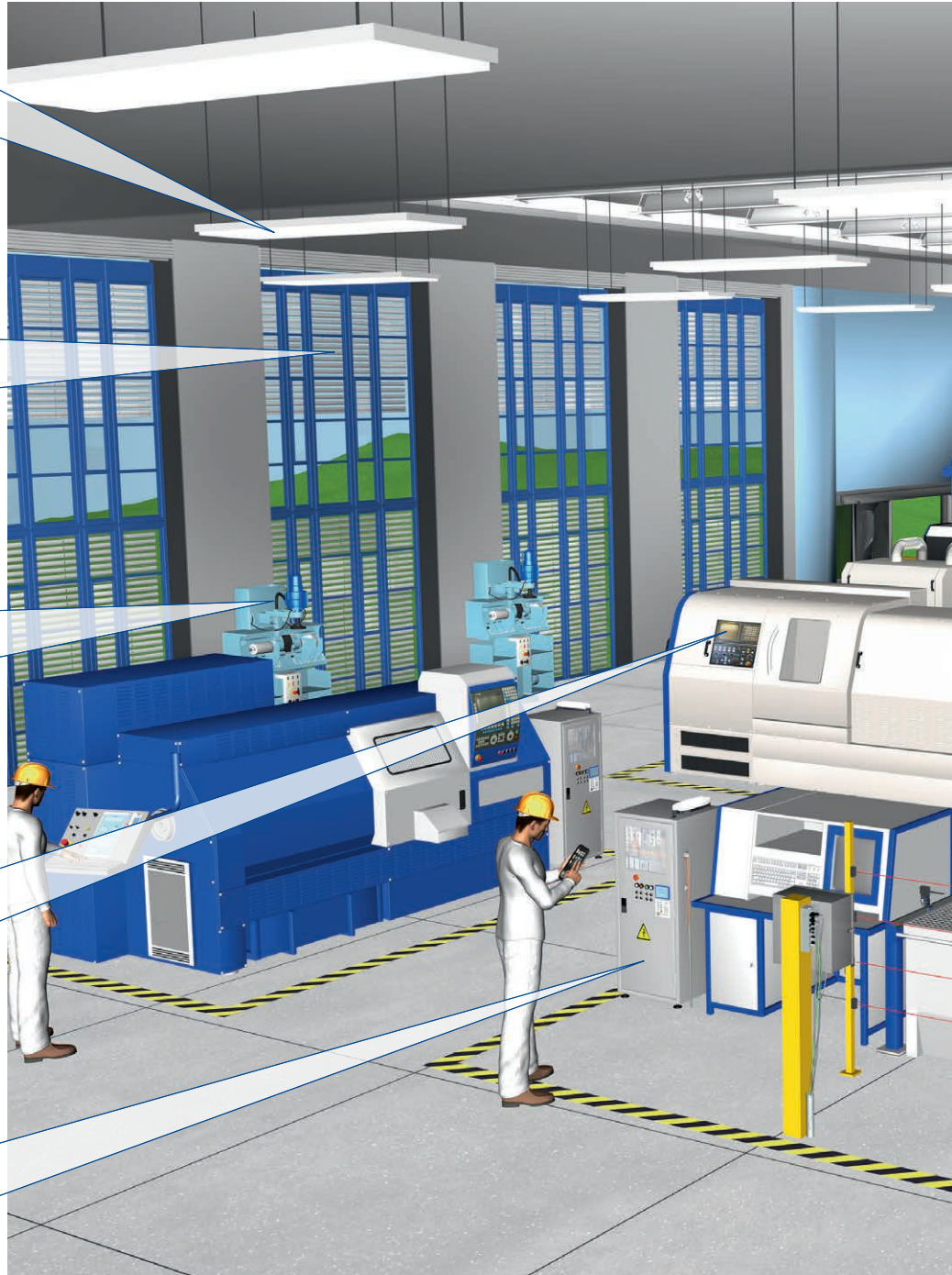
M23 Series

The perfect choice to interconnect machines and controls like HMIs (Human Machine Interfaces)

Mini Power Series

Power distribution within shop floor surroundings such as control cabinets and machines

CA Series

Ideal field attachable connector as flexible solution for mobile machinery and conveyor belts

7/8" Series

Reliable power supply for critical applications in industrial environments such as light barrier

M12 Power Series K-coding

Maximum power for rotary current drives also in combination with robotic systems in automated production lines

M12 Power Series S-coding

Smaller connection for high power applications such as frequency converters

M12 Power Series L-coding

Designed and engineered to use in combination with Industrial Ethernet I/O modules

Product Overview

Products		M12 Power	G/GO	CA	7/8"
General Data	Pin Assignment	S = 3 + PE / T = 4 K = 4 + PE / L = 4 + FE	2 / 2 + PE / 3 + PE / 4 5 + PE / 6 / 6 + PE / 7	3 + PE / 6 + PE	2 / 2 + PE 4 / 4 + PE
	Max. Operating Voltage	600 V AC/DC	230 V AC/DC	400 V AC/230 V DC	230 V AC/DC 600 V AC/DC*
	Max. Current	16 A	10 A	16 A AC/10 A DC	12 A
	IP-Rating	IP65, IP67, IP69	IP65	IP65, IP67	IP67, IP68 (2h at 10 bar)
Approvals	VDE	●	●	●	
	UL	●		●	●*
	CSA			●	●*
Assembly Design	Molded	●	●		●
	Field Attachable	●	●	●	●
	Receptacle	●	●	●	●
Key Environments	Ruggedized	●	●	●	●
	Mobile Equipment	●	●	●	
	Outdoor		●	●	
	Extreme Climate	●			
	Underwater	●			●
	Household Appliance				
Key Markets	Automotive	●			●
	Machine Building	●	●	●	●
	Transportation	●		●	
	Automation	●	●	●	●
	Infrastructure	●		●	
	Building Automation				
	Material Handling	●	●	●	●

* US version only

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Products		ST	M23	Mini Power
General Data	Pin Assignment	2 + PE / 3 + PE 4 + PE / 5 + PE	12 / 11 + PE 19 / 18 + PE	2 + PE / 3 + PE
	Max. Operating Voltage	400 V AC/230 V DC	120 V AC/DC	600 V AC/DC
	Max. Current	16 A AC/10 A DC	8 A	30 A
	IP-Rating	IP54	IP65, IP67	IP67, IP68
Approvals	VDE	●		
	UL	●		●
	CSA			●
Assembly Design	Molded	●	●	●
	Field Attachable	●	●	
	Receptacle	●	●	●
Key Environments	Ruggedized	●		●
	Mobile Equipment		●	
	Outdoor	●		
	Extreme Climate		●	
	Underwater			●
	Household Appliance	●		
Key Markets	Automotive		●	●
	Machine Building	●	●	●
	Transportation			●
	Automation	●	●	●
	Infrastructure		●	
	Building Automation	●		
	Material Handling			●

Cable Overview

Control Cable	Conductor Size	Cable Material	Jacket Color	Temperature Range Stationary	Cable Shielding	Cable Characteristics
001	3G0.75 mm²	PVC	Orange	-40 °C to +90 °C	No	Vibration
002	4X0.5 mm²	PVC	Orange	-40 °C to +90 °C	No	Vibration
003	2X0.75 mm²	PVC	Orange	-40 °C to +90 °C	No	Vibration
004	5G0.5 mm²	PVC	Orange	-40 °C to +90 °C	No	Vibration
242	16G0.5 mm²/3X1.0 mm²	PUR	Black	-50 °C to +80 °C	No	Drag chain, UL, Vibration
256	8G0.5 mm²/3X1.0 mm²	PUR	Black	-50 °C to +80 °C	No	Drag chain, UL, Vibration
637	4X18 AWG	TPE	Yellow	-40 °C to +90 °C	No	Vibration
678	16 AWG	PVC	Black, White	-40 °C to +105 °C	No	UL
700	4G1.5 mm²	PUR	Black	-40 °C to +125 °C	Yes	Electromagnetic, Oil, Drag chain, Vibration
703	4G1.5 mm²	PUR	Black	-40 °C to +125 °C	No	Oil, Drag chain, UL, Vibration
722	4X1.5 mm²	PUR	Black	-40 °C to +125 °C	Yes	Electromagnetic, Oil, Drag chain, UL, Vibration
723	4X1.5 mm²	PUR	Black	-40 °C to +125 °C	No	Oil, Drag chain, UL, Vibration
731	3X18 AWG	TPE	Yellow	-40 °C to +90 °C	No	
733	4G1.5 mm²	PVC	Black	-40 °C to +90 °C	No	Oil, Drag chain, UL, Vibration
735	5G1.5 mm²	PVC	Black	-40 °C to +90 °C	No	Oil, UL, Vibration
736	5G0.75 mm²	PVC	Black	-40 °C to +90 °C	No	Oil, Drag chain, UL, Vibration
794	5X18 AWG	TPE	Yellow	-40 °C to +90 °C	No	Vibration
800	3G10 AWG	TPE	Black	-30 °C to +90 °C	No	Oil, UL, Vibration
802	3G14 AWG	TPE	Black	-30 °C to +90 °C	No	Oil, UL, Vibration
803	4G10 AWG	TPE	Black	-30 °C to +90 °C	No	Oil, UL, Vibration
805	4G14 AWG	TPE	Black	-30 °C to +90 °C	No	Oil, UL
838	3X16 AWG	TPE	Yellow	-40 °C to +90 °C	No	Vibration
839	4X16 AWG	TPE	Yellow	-40 °C to +90 °C	No	Vibration
877	5X16 AWG	TPE	Yellow	-40 °C to +90 °C	No	Vibration
910	5G1.5 mm²	PUR	Black	-40 °C to +125 °C	Yes	Electromagnetic, Oil, Drag chain, UL, Vibration
911	5G1.5 mm²	PUR	Black	-40 °C to +125 °C	No	Oil, Drag chain, UL, Vibration
912	5G2.5 mm²	PUR	Black	-40 °C to +125 °C	No	Oil, Drag chain, UL, Vibration
915	4G1.5 mm²	PVC	Black	-30 °C to +80 °C	Yes	Electromagnetic, Oil, Drag chain, UL, Vibration
916	5G1.5 mm²	PVC	Black	-30 °C to +80 °C	Yes	Electromagnetic, Oil, Drag chain
921	5G2.5 mm²	PUR	Black	-30 °C to +125 °C	Yes	Electromagnetic, Oil, Drag chain, UL, Vibration
949	5G1.5 mm²	PUR	Grey	-40 °C to +125 °C	No	Oil, Drag chain, UL, Vibration
950	5G2.5 mm²	PUR	Grey	-40 °C to +125 °C	No	Oil, Drag chain, UL, Vibration
956	5G1.5 mm²	PUR	Grey	-40 °C to +125 °C	Yes	Electromagnetic, Oil, Drag chain, UL, Vibration
957	5G2.5 mm²	PUR	Grey	-40 °C to +125 °C	Yes	Electromagnetic, Oil, Drag chain, UL, Vibration
ST	3G0.75 mm²	H05RR	Black	-30 °C to +60 °C	No	UV, Vibration
ST	4G0.75 mm²	H05RR	Black	-30 °C to +60 °C	No	UV, Vibration
ST	5G0.75 mm²	H05RR	Black	-30 °C to +60 °C	No	UV, Vibration
G	2X0.75 mm²	H05RN	Black	-25 °C to +70 °C	No	Vibration
G	3G1.0 mm²	PVC	Grey	-25 °C to +70 °C	No	Vibration
G	4G0.75 mm²	PVC	Grey	-25 °C to +70 °C	No	Vibration
G	4X1.0 mm²	PVC	Grey	-25 °C to +70 °C	No	Vibration

Legend:
- Vibration and shock resistance
- Oil, coolants, lubricants and emulsion resistance
- UL UL-approved
- Drag chain suitability
- UV resistance
- Electromagnetic resistance

Cable Material Comparison

| Material	High Temp	Low Temp	Flexibility	UV-Rays	Chemicals	Oil
PUR	●●●●	●●●○	●●●○	●●●○	●●●●	●●●○
PVC	●●○○	●●○○	●●○○	●●●○	●●●○	●●○○
TPE	●●●○	●●●●	●●●●	●●○○	●●○○	●●●○

●○○○ = Poor   ●●○○ = Fair   ●●●○ = Good   ●●●● = Excellent

Please request datasheet for more detailed information

IP Code

Index		Degree of Protection
0		No protection against accidental contact, no protection against solid foreign bodies
1		Protection against contact with any large area by hand and against solid foreign bodies with Ø >50 mm
2		Protection against contact with the fingers, protection against solid foreign bodies with Ø >12 mm
3		Protection against tools, wires or similar objects with Ø >2.5 mm, protection against solid foreign bodies with Ø >2.5 mm
4		Just like 3 except for the size difference of Ø >1 mm
5		Full protection against contact, protection against interior injurious dust deposits
6		Total protection against contact, protection against penetration of dust

Index		Degree of Protection
0		No protection against water
1		Protection against vertical water drops
2		Protection against water drops (up to a 15° angle)
3		Protection against diagonal water drops (up to a 60° angle)
4		Protection against splashed water from all directions
5		Protection against water (out of a nozzle) from all directions
6		Protection against water penetration during temporary flooding
7		Protection against temporary submersion in water
8		Protection against permanent submersion in water
9K		Protected against water from high-pressure/steam jet cleaners
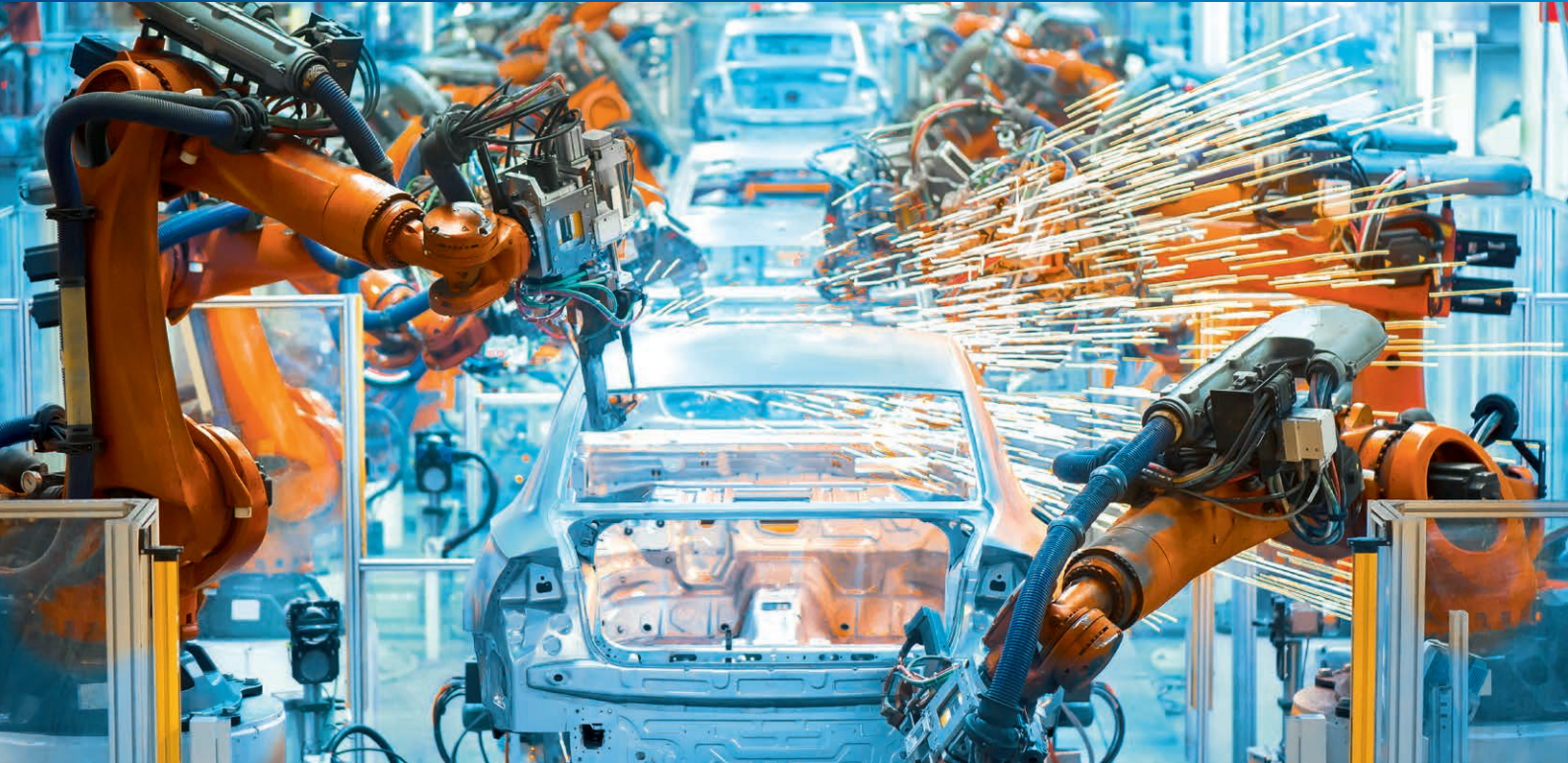
Circular Connectors
M12 Power Series

When only the Best is Good Enough – World's Strongest M12 Connector

The M12 Power Series opens the world of conventional M12 technology to high-power transmission. Carrying 16 A at 630 V it is your answer to the increasing demand for powerful connectivity in the smallest possible housings.

The Benefits

Ready for any challenge – full power in hot, wet, particularly dusty or even moving applications

Performance you can rely on – thanks to high-class material and various international approvals

Comprehensive portfolio – four different codings to fulfill the need of almost every application

Markets

- Machine building
- Automation
- Automotive
- Material handling
- Infrastructure
- Transportation

Technical Information

M12 Power Series	4-pole S-coding	5-pole L-coding	5-pole K-coding	4-pole T-coding
General Data				
No. of Pins	4 (3 + PE)	5 (4 + FE)	5 (4 + PE)	4
Cable-Gland (field attachable)	PG 11	PG 11	PG 11	PG 11
Cable-Range (field attachable)	ø 3.0 mm to 11.0 mm	ø 3.0 mm to 11.0 mm	ø 3.0 mm to 11.0 mm	ø 3.0 mm to 11.0 mm
Terminal Type (field attachable)	Screw	Crimp	Crimp	Screw
Conductor Size (field attachable)	0.5 mm² to 1.5 mm²	0.75 mm², 1.5 mm², 2.5 mm²	0.75 mm², 1.5 mm², 2.5 mm²	0.5 mm² to 1.5 mm²
Cable Material (molded)	PUR, PVC	PUR	PUR, PVC	PUR
Conductor Size (molded)	1.5 mm²	1.5 mm², 2.5 mm²	0.75 mm², 1.5 mm², 2.5 mm²	1.5 mm²
Housing Color	Blue, Black	Blue, Black	Blue, Black	Blue, Black
Electrical Data				
Operating Voltage	600 V AC/DC	50 V AC/60 V DC	600 V AC/DC	50 V AC/60 V DC
Current	16 A AC/DC	16 A AC/DC	16 A AC/DC	16 A AC/DC
Environmental Data				
Ambient Temperature*	-40 °C to +125 °C	-40 °C to +125 °C	-40 °C to +125 °C	-40 °C to +125 °C
Protection Degree	IP65, IP67, IP69	IP65, IP67, IP69	IP65, IP67, IP69	IP65, IP67, IP69
Approvals	VDE, UL	VDE, UL	VDE, UL	VDE, UL

* Notice derating and cable temperature

Product Configurator

Cordsets

| R | S | T | S | | 5 | K | - | 7 | 3 | 5 | / | 5 | M |

Gender & Design

RST = Male cordset, molded, straight
RSWT = Male cordset, molded, 90° angled
RKT = Female cordset, molded, straight
RKWT = Female cordset, molded, 90° angled

Shielding

S = 360° shielding   ☐ = No shielding

Coding & Pin Assignment

5K = K-coding, 5-pole (4+PE)   4S = S-coding, 4-pole (3+PE)
5L = L-coding, 5-pole (4+FE)   4T = T-coding, 4-pole

Cable Style

S-coding
733 = 4G1.5 mm², PVC, Black
703 = 4G1.5 mm², PUR, Black
915 = 4G1.5 mm², shielded, PVC, Black
700 = 4G1.5 mm², shielded, PUR, Black

L-coding
949 = 5G1.5 mm², PUR, Grey
950 = 5G2.5 mm², PUR, Grey
956 = 5G1.5 mm², shielded, PUR, Grey
957 = 5G2.5 mm², shielded, PUR, Grey

K-coding
736 = 5G0.75 mm², PVC, Black
735 = 5G1.5 mm², PVC, Black
912 = 5G2.5 mm², PVC, Black
911 = 5G1.5 mm², PUR, Black
916 = 5G1.5 mm², shielded, PVC, Black
921 = 5G2.5 mm², shielded, PVC, Black
910 = 5G1.5 mm², shielded, PUR, Black

T-coding
722 = 4X1.5 mm², shielded, PUR, Black
723 = 4X1.5 mm², PUR, Black

X: Without PE
G: With PE

Other cable styles available upon request.
Please contact: icos-sales@belden.com

Cable Length

2M = 2 meter
5M = 5 meter
10M = 10 meter

Other cable lengths available upon request.
Please contact: icos-sales@belden.com

Field Attachables

| R | K | C | C | S | | 5 | K | / | 1 | 1 | | 1 | , | 5 |

Gender & Design

L- & K-coding (crimp type)

RSCC = Male connector, field attachable, straight
RKCC = Female connector, field attachable, straight

S- & T-coding (screw type)

RSC = Male connector, field attachable, straight
RKC = Female connector, field attachable, straight

Shielding

S = 360° shielding (not optional)

Coding & Pin Assignment

5K = K-coding, 5-pole (4 + PE)   4S = S-coding, 4-pole (3 + PE)
5L = L-coding, 5-pole (4 + FE)   4T = T-coding, 4-pole

Cable Gland

11 = PG11

Cross-section

0,75 = 0.75 mm² crimp-contact (L- & K-coding)   2,5 = 2.5 mm² crimp-contact (L- & K-coding)
1,5 = 1.5 mm² crimp-contact (L- & K-coding)   ☐ = 0.5 to 1.5 mm² (S- & T-coding with screw terminal)

Order Overview

M12 Power Series	S-coded 4-pole (3 + PE)		L-coded 5-pole (4 + FE)	
	Male	Female	Male	Female
1. Choose Coding →				
2. Choose Design ↓				
Field Attachables				
Straight, screw type, shielded/unshielded	RSCS 4S/11	RKCS 4S/11	–	–
Straight, crimp type, shielded/unshielded	–	–	RSCCS 5L/11,1.5	RKCCS 5L/11,1.5
Receptacles				
Front mount	RSF6S 4S-033/0,2 M	RKF6S 4S-033/0,2 M	RSF6S 5L-033/0,2 M	RKF6S 5L-033/0,2 M
Front mount (positionable)	RSP6S 4S-033/0,2 M	RKP6S 4S-033/0,2 M	RSP6S 5L-033/0,2 M	RKP6S 5L-033/0,2 M
Rear mount	RSH6S 4S-033/0,2 M	RKH6S 4S-033/0,2 M	RSH6S 5L-033/0,2 M	RKH6S 5L-033/0,2 M
Flange (20x20)	RSA0S 4S-033/0,2 M	–	RSA0S 5L-033/0,2 M	–
Single-Ended Cordsets				
Straight, unshielded	RST 4S-703/*M	RKT 4S-703/*M	RST 5L-949/*M	RKT 5L-949/*M
Straight, shielded	RSTS 4S-700/*M	RKTS 4S-700/*M	RSTS 5L-956/*M	RKTS 5L-956/*M
Angled, unshielded	RSWT 4S-703/*M	RKWT 4S-703/*M	RSWT 5L-949/*M	RKWT 5L-949/*M
Double-Ended Cordsets				
Straight-to-straight, unshielded	RST 4S-RKT 4S-703/*M		RST 5L-RKT 5L-949/*M	
Straight-to-straight, shielded	RSTS 4S-RKTS 4S-700/*M		RSTS 5L-RKTS 5L-956/*M	
Straight-to-angled, unshielded	RST 4S-RKWT 4S-703/*M		RST 5L-RKWT 5L-949/*M	
Angled-to-angled, unshielded	RSWT 4S-RKWT 4S-703/*M		RSWT 5L-RKWT 5L-949/*M	

M12 Power Series	K-coded 5-pole (4 + PE)		T-coded 4-pole	
	Male	Female	Male	Female
1. Choose Coding →				
2. Choose Design ↓				
Field Attachables				
Straight, screw type, shielded/unshielded	–	–	RSCS 4T/11	RKCS 4T/11
Straight, crimp type, shielded/unshielded	RSCCS 5K/11,1.5	RKCCS 5K/11,1.5	–	–
Receptacles				
Front mount	RSF6S 5K-033/0,2 M	RKF6S 5K-033/0,2 M	RSF6U 4T-033/0,2 M	RKF6U 4T-033/0,2 M
Front mount (positionable)	RSP6S 5K-033/0,2 M	RKP6S 5K-033/0,2 M	RSP6U 4T-033/0,2 M	RKP6U 4T-033/0,2 M
Rear mount	RSH6S 5K-033/0,2 M	RKH6S 5K-033/0,2 M	RSH6U 4T-033/0,2 M	RKH6U 4T-033/0,2 M
Flange (20x20)	RSA0S 5K-033/0,2 M	–	RSA0U 4T-033/0,2 M	–
Single-Ended Cordsets				
Straight, unshielded	RST 5K-911/*M	RKT 5K-911/*M	RST 4T-723/*M	RKT 4T-723/*M
Straight, shielded	RSTS 5K-910/*M	RKTS 5K-910/*M	RSTS 4T-722/*M	RKTS 4T-722/*M
Angled, unshielded	RSWT 5K-911/*M	RKWT 5K-911/*M	RSWT 4T-723/*M	RKWT 4T-723/*M
Double-Ended Cordsets				
Straight-to-straight, unshielded	RST 5K-RKT 5K-911/*M		RST 4T-RKT 4T-723/*M	
Straight-to-straight, shielded	RSTS 5K-RKTS 5K-910/*M		RSTS 4T-RKTS 4T-722/*M	
Straight-to-angled, unshielded	RST 5K-RKWT 5K-911/*M		RST 4T-RKWT 4T-723/*M	
Angled-to-angled, unshielded	RSWT 5K-RKWT 5K-911/*M		RSWT 4T-RKWT 4T-723/*M	

Rectangular Connectors
G/GO Series

The Space-Saver: Great in Performance – Small in Size

Where other connectors may find conditions too tight, the G/GO Series is right at home – and that's why the rectangular connector with its compact dimensions plays a major role in the world of miniaturization.

The Benefits

Extremely tough – especially designed for applications with persistent mechanical stress, e.g. in underground mining surroundings

Flexible to use – viable for a wide range of industries due to various pin assignments

Flexible to fit – square (G) and rectangular designs (GO) to match your individual application

Markets

- Machine building
- Automation
- Material handling
- Underground mining

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Technical Information

G/GO Series	G Series 2-pole	G Series 3-pole	G Series 4-pole	GO Series 6-pole	GO Series 7-pole
General Data					
No. of Pins	2	2 + PE	Molded: 3 + PE, 4 Field attachable: 4 Receptacle: 4	5 + PE, 6	6 + PE, 7
Cable-Gland (field attachable)	–	PG 7	PG 7	PG 7	PG 11
Cable-Range (field attachable)	–	ø 4.5 mm to 7.5 mm	ø 4.5 mm to 6.0 mm	ø 4.0 mm to 7.5 mm	ø 4.0 mm to 10.0 mm
Terminal Type (field attachable)	–	Solder	Solder	Solder	Screw
Conductor Size (field attachable)	–	0.15 mm² to 0.5 mm²	0.15 mm² to 0.5 mm²	0.15 mm² to 0.5 mm²	0.25 mm² to 1.0 mm²
Cable Material (molded)	PVC	PVC	PVC	–	–
Conductor Size (molded)	0.75 mm²	1.0 mm²	0.75 mm², 1.0 mm²	–	–
Housing Color	Black, Grey	Black, Grey	Black, Grey	Black	Black
Electrical Data					
Operating Voltage	50 V AC/DC	230 V AC/DC	3 + PE: 230 V AC/DC 4: 50 V AC/DC	5 + PE: 230 V AC/DC 6: 50 V AC/DC	6 + PE: 230 V AC/DC 7: 50 V AC/DC
Current	10 A AC/DC	Molded: 10 A AC/DC Field attachable: 6 A AC/DC	Molded: 10 A AC/DC Field attachable: 6 A AC/DC Receptacle: 10 A AC/DC	6 A AC/DC	10 A AC 6 A DC
Environmental Data					
Ambient Temperature*	-40 °C to +90 °C	-40 °C to +90 °C	-40 °C to +90 °C	-40 °C to +90 °C	-40 °C to +90 °C
Protection Degree	IP65	IP65	IP65	IP65	IP65
Approvals	VDE	VDE	VDE	VDE	VDE

* Notice derating and cable temperature

Product Configurator

G Series Cordsets und Field Attachables

| G | 30 | KW | 3 | F | 2M | GREY |

Series Indicator
G = G Series

Pin Assignment
2 = 2-pole (molded only)
20 = 3-pole (2 + PE)
30 = 4-pole (3 + PE)
4 = 4-pole

Geometry Design
KW = Molded, 90° angled
W = Field attachable, 90° angled

Protective Earth
1 = Without earth conductor
3 = With earth conductor

Gender
M = Male connector
F = Female connector

Cable Length
☐ = Cordless (field attachable)
1,5M = 1.5 meter
2M = 2 meter   Other cable lengths available upon request.
3M = 3 meter   Please contact: icos-sales@belden.com

Housing Color
GREY = Grey housing
BLACK = Black housing

GO Series Field Attachables and Receptacles

| GO | 070 | WF |

Series Indicator
GO = GO Series (long edition 5-, 6- and 7-pole)

Pin Assignment
51 = 6-pole (5 + PE/230 V)
6 = 6-pole (50 V)
60 = 6-pole (230 V)
610 = 7-pole (6 + PE/230 V)
070 = 7-pole (50 V)
700 = 7-pole (230 V)

Geometry Design
WF = 90° angled, female, (field attachable)
UM = Male, PCB mount, (receptacle)
FAV M = Male, octagonal flange, (receptacle)
FA M = Male, rectangular flange, (receptacle)

Order Overview

G Series

1. Choose Coding → 2. Choose Design	2-pole		3-pole (2 + PE)	
	Male	**Female**	**Male**	**Female**
Field Attachables				
G Series, angled, solder type	–	–	–	G 20 W 3 F Grey
Receptacles				
G Series, solder type	–	–	–	–
Single-Ended Cordsets				
G Series, angled	–	G 2 KW 1 F *M Grey	G 20 KW 3 M *M Grey	G 20 KW 3 F *M Grey

G Series

1. Choose Coding → 2. Choose Design	4-pole (3 + PE)		4-pole	
	Male	**Female**	**Male**	**Female**
Field Attachables				
G Series, angled, solder type	–	G 30 W 3 F Grey	–	G 4 W 1 F Grey
Receptacles				
G Series, solder type	G 30 A 3 M Grey	G 30 E 3 F Grey	G 4 A 1 M Grey	–
Single-Ended Cordsets				
G Series, angled	G 30 KW 3 M *M Grey	G 30 KW 3 F *M Grey	–	G 4 KW 1 F *M Grey

GO Series

1. Choose Coding → 2. Choose Design	6-pole (5 + PE)		6-pole	
	Male	**Female**	**Male**	**Female**
Field Attachables				
GO Series, angled, solder type	–	GO 51 WF Black	–	GO 6 WF Black (50 V) GO 6 WF Black (230 V)
GO Series, angled, screw type	–	–	–	–
Receptacles				
GO Series, solder type	GO 51 UM	–	GO 6 UM (50 V) GO 60 UM (230 V)	–
GO Series, solder type with flange	GO 51 FAV M	–	GO 6 FAV M (50 V) GO 60 FAV M (230 V)	–

GO Series

1. Choose Coding → 2. Choose Design	7-pole (6 + PE)		7-pole	
	Male	**Female**	**Male**	**Female**
Field Attachables				
GO Series, angled, solder type	–	–	–	–
GO Series, angled, screw type	–	GO 610 WF Black	–	GO 070 WF Black (50 V) GO 700 WF Black (230 V)
Receptacles				
GO Series, solder type	–	–	–	–
GO Series, solder type with flange	GO 610 FA M	–	GO 070 FA M (50 V) GO 700 FA M (230V)	–

Blue highlighted product features are available in different variants. Please see page 16 for more information.

Circular Connectors
CA Series

Reliable Power Transmission – where you need it, when you need it

Combining the advantages of a lightweight plastic housing with the mechanical robustness of an industrial connector, the CA Series represents a reliable solution for the most demanding applications.

The Benefits

Ruggedized for performance – well-proven power supply for wet, dusty and harsh surroundings

Intuitive to handle – thanks to user-friendly termination and assembly in a jiffy

Versatile to use – technologically convincing connectivity solution for a wide range of applications

Markets

- Machine building
- Measurement and control
- Automation
- Logistics
- Infrastructure
- Material handling

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Technical Information

CA Series	4-pole (3 + PE)	7-pole (6 + PE)
General Data		
No. of Pins	3 + PE	6 + PE
Cable-Gland (field attachable)	TR 22	TR 22
Cable-Range (field attachable)	ø 6 mm to 12 mm	ø 6 mm to 12 mm
Terminal Type (field attachable)	Screw	Solder
Conductor Size (field attachable)	0.5 mm² to 2.5 mm²	max. 0.75 mm²
Cable Material (molded)	–	–
Conductor Size (molded)	–	–
Housing/Contact Holder Color	Black, White, Red, Blue	Black, White, Red, Blue
Electrical Data		
Operating Voltage	400 V AC/230 V DC	230 V AC/DC
Current	16 A AC/10 A DC	10 A AC/DC
Environmental Data		
Ambient Temperature*	-40 °C to +90 °C	-40 °C to +90 °C
Protection Degree	IP65, IP67	IP65, IP67
Approvals	UL, VDE, CSA	UL, VDE, CSA

* Notice derating and cable temperature

Product Configurator

Field Attachables and Receptacles

C	A		3		W		L	S		B	L	U	E

Series Indicator

CA = CA Series

Pin Assignment

3 = 4-pole (3 + PE)
6 = 7-pole (6 + PE)

Geometry Design

☐ = Straight
W = 90° angled

Gender & Design

LS = Male connector, field attachable
LD = Female connector, field attachable
GS = Male connector, receptacle with flange
GD = Female connector, receptacle with flange

Housing / Contact Holder Color

BLACK = Black housing
BLUE = Blue housing
RED = Red housing
WHITE = White housing

CA Series – intuitive assembly in a jiffy
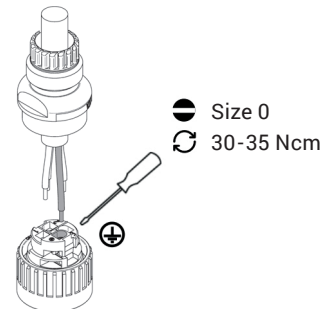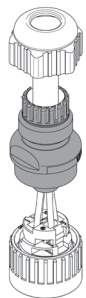
Ø = 6-9 mm   Ø = 9-12 mm
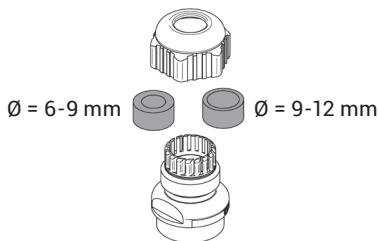
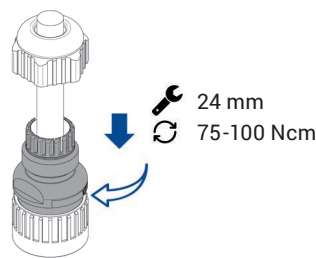Pick the right sealing depending on your cable size.
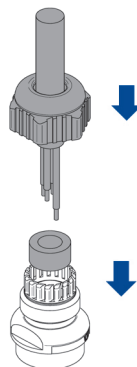
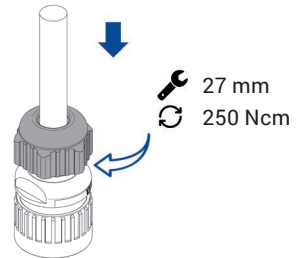Insert the sealing into the body, then push the cable through.

Size 0
30-35 Ncm

Unscrew the PE-contact, insert the PE-conductor and tighten again.
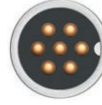
Repeat this procedure for the remaining contacts.

24 mm
75-100 Ncm

Screw the connector body to the contact holder.

27 mm
250 Ncm

Screw the cable gland to the connector body.

Order Overview

CA Series	4-pole (3 + PE)		7-pole (6 + PE)	
	Male	**Female**	**Male**	**Female**
1. Choose Coding → **2. Choose Design** ↓				
Field Attachables				
Straight, screw type	CA 3 LS	CA 3 LD	–	–
Straight, solder type	–	–	CA 6 LS	CA 6 LD
Angled, screw type	CA 3 W LS	CA 3 W LD	–	–
Angled, solder type	–	–	CA 6 W LS	CA 6 W LD
Receptacles				
Screw type	CA 3 GS	CA 3 GD	–	–
Solder type	–	–	CA 6 GS	CA 6 GD
Accessories				
Safety cap for field attachables, variable loop	CA 00 SD 1	CA 00 SD 3	CA 00 SD 1	CA 00 SD 3
Safety cap for receptacles, fixed loop	CA 00 SD 2	CA 00 SD 4	CA 00 SD 2	CA 00 SD 4

Please see page 20 for more information.

lumberg automation
A **BELDEN** BRAND

Circular Connectors
7/8" Series

Sealed like a submarine – completely watertight up to 100 meters

The circular connectors of the 7/8" Series feature very high mechanical and electrical durability. A special PUR-overmolding prevents dust and moisture from entering the connector and ensures impermeability up to 10 bar.

The Benefits

Feel the difference – high-quality material ensuring a long lifetime and exceptional operational reliability

Great variety – a wide range of versions offers flexible connection solutions

Worldwide valued – internationally standardized interface for global usage

Markets

- Machine building
- Automation
- Material handling
- Automotive

Technical Information

7/8" Series	2-pole	3-pole (2 + PE)	4-pole	5-pole (4 + PE)
General Data				
No. of Pins	2	2 + PE	Molded: 4-pole Field attachable: 3 + PE Receptacle: 4-pole	4 + PE
Cable-Gland (field attachable)	–	PG 9, 11, 13.5, 16	PG 9, 11, 13.5, 16	PG 9, 11, 13.5, 16
Cable-Range (field attachable)	–	PG 9: ø 6.0 mm to 8.0 mm PG 11: ø 8.0 mm to 10.0 mm PG 13.5: ø 10.0 mm to 12.0 mm PG 16: ø 12.0 mm to 14.0 mm	PG 9: ø 6.0 mm to 8.0 mm PG 11: ø 8.0 mm to 10.0 mm PG 13.5: ø 10.0 mm to 12.0 mm PG 16: ø 12.0 mm to 14.0 mm	PG 9: ø 6.0 mm to 8.0 mm PG 11: ø 8.0 mm to 10.0 mm PG 13.5: ø 10.0 mm to 12.0 mm PG 16: ø 12.0 mm to 14.0 mm
Terminal Type (field attachable)	–	Screw	Screw	Screw
Conductor Size (field attachable)	–	max. 1.5 mm²	max. 1.5 mm²	max. 1.5 mm²
Cable Material (molded)	PVC	PVC	PVC	PVC
Conductor Size (molded)	0.75 mm²	0.75 mm²	0.5 mm²	0.5 mm²
Housing Color	Orange, Yellow**	Molded: Orange, Yellow** Field attachable: Black	Molded: Orange, Yellow** Field attachable: Black	Molded: Orange, Yellow** Field attachable: Black
Electrical Data				
Operating Voltage	230 V AC/DC / 600 V AC/DC**	230 V AC/DC / 600 V AC/DC**	230 V AC/DC / 600 V AC/DC**	230 V AC/DC / 600 V AC/DC**
Current	12 A AC/DC	12 A AC/DC	9 A AC/DC	9 A AC/DC
Environmental Data				
Ambient Temperature*	-40 °C to +90 °C	-40 °C to +90 °C	-40 °C to + 90°C	-40 °C to +90 °C
Protection Degree	Molded: IP68 (2h, 10 bar) Field attachable: IP67 Receptacle: IP68 (1h, 10 bar)	Molded: IP68 (2h, 10 bar) Field attachable: IP67 Receptacle: IP68 (1h, 10 bar)	Molded: IP68 (2h, 10 bar) Field attachable: IP67 Receptacle: IP68 (1h, 10 bar)	Molded: IP68 (2h, 10 bar) Field attachable: IP67 Receptacle: IP68 (1h, 10 bar)
Approvals	–	–	–	–

* Notice derating and cable temperature   ** US version only

Product Configurator

Cordsets

`R` `K` `2` `0` `-` `0` `3` `/` `2` `M`

Gender & Design

RS = Male cordset, molded, straight
RSW = Male cordset, molded, 90° angled
RK = Female cordset, molded, straight
RKW = Female cordset, molded, 90° angled

Pin Assignment

20 = 2-pole, male coupling nut with external threads
30 = 3-pole (2 + PE), male coupling nut with external threads
40 = 4-pole, male coupling nut with external threads
50 = 5-pole (4 + PE), male coupling nut with external threads

US Version

301 = 3-pole (2 + PE), male coupling nut with internal threads
401 = 4-pole, male coupling nut with internal threads
501 = 5-pole (4 + PE), male coupling nut with internal threads

Cable Style

01 = 3G0.75 mm², PVC, Orange   **03** = 2X0.75 mm², PVC, orange
02 = 4X0.5 mm², PVC, Orange   04 = 5G0.5 mm², PVC, orange

US Version

2-pole   **3-pole**

678 = 2X16 AWG, PVC, Yellow, STOW   731 = 3X18 AWG, TPE, Yellow, PLTC
                                    838 = 3X16 AWG, TPE, Yellow, TC-ER

4-pole   **5-pole**

637 = 4X18 AWG, TPE, Yellow, PLTC   794 = 5X18 AWG, TPE, Yellow, PLTC
839 = 4X16 AWG, TPE, Yellow, TC-ER 877 = 5X16 AWG, TPE, Yellow, TC-ER

X: Without PE   Other cable styles available upon request.
G: With PE   Please contact: icos-sales@belden.com

Cable Length

2M = 2 meter
5M = 5 meter   Other cable lengths available upon request.
10M = 10 meter   Please contact: icos-sales@belden.com

Field Attachables

`R` `K` `C` `3` `0` `/` `9`

Gender & Design

RSC = Male connector, field attachable, straight
RKC = Female connector, field attachable, straight

Pin Assignment

30 = 3-pole (2 + PE), male coupling nut with external threads
40 = 4-pole (3 + PE), male coupling nut with external threads
50 = 5-pole (4 + PE), male coupling nut with external threads

US Version

301 = 3-pole (2 + PE), male coupling nut with internal threads
401 = 4-pole, male coupling nut with internal threads
501 = 5-pole (4 + PE), male coupling nut with internal threads

Cable Gland

9 = PG 9
11 = PG 11
13,5 = PG 13.5
16 = PG 16

Order Overview

7/8" Series	2-pole		3-pole (2 + PE)	
	Male	**Female**	**Male**	**Female**
1. Choose Coding →				
2. Choose Design				
Field Attachables				
Straight, screw type, PG 9, external threads	–	–	RSC 30/9	RKC 30/9
Straight, screw type, PG 11, external threads	–	–	RSC 30/11	RKC 30/11
Straight, screw type, PG 13.5, external threads	–	–	RSC 30/13,5	RKC 30/13,5
Straight, screw type, PG 16, external threads	–	–	RSC 30/16	RKC 30/16
Straight, screw type, PG 9, internal threads	–	–	RSC 301/9	–
Straight, screw type, PG 11, internal threads	–	–	RSC 301/11	–
Straight, screw type, PG 13.5, internal threads	–	–	RSC 301/13,5	–
Straight, screw type, PG 16, internal threads	–	–	RSC 301/16	–
Receptacles				
Front mount, with stranded wire, PG 11	RSF 20/11-03	RKF 20/11-03	RSF 30/11-01	RKF 30/11-01
Front mount, with stranded wire, PG 13.5	RSF 20/13,5-03	RKF 20/13,5-03	RSF 30/13,5-01	RKF 30/13,5-01
Single-Ended Cordsets				
Straight, external threads	RS 20-03/*M	RK 20-03/*M	RS 30-01/*M	RK 30-01/*M
Angled, external threads	RSW 20-03/*M	RKW 20-03/*M	RSW 30-01/*M	RKW 30-01/*M
Straight, internal threads	–	–	RS 301-01/*M	RK 301-01/*M
Angled, internal threads	–	–	RSW 301-01/*M	RKW 301-01/*M
Double-Ended Cordsets				
Straight-to-straight, external threads	RSRK 20-03/* M		RSRK 30-01/* M	
Straight-to-angled, external threads	RSRKW 20-03/* M		RSRKW 30-01/* M	
Angled-to-angled, external threads	RSWRKW 20-03/* M		RSWRKW 30-01/* M	

7/8" Series	4-pole (3 + PE)		5-pole (4 + PE)	
	Male	**Female**	**Male**	**Female**
1. Choose Coding →				
2. Choose Design				
Field Attachables				
Straight, screw type, PG 9, external threads	RSC 40/9	RKC 40/9	RSC 50/9	RKC 50/9
Straight, screw type, PG 11, external threads	RSC 40/11	RKC 40/11	RSC 50/11	RKC 50/11
Straight, screw type, PG 13.5, external threads	RSC 40/13,5	RKC 40/13,5	RSC 50/13,5	RKC 50/13,5
Straight, screw type, PG 16, external threads	RSC 40/16	RKC 40/16	RSC 50/16	RKC 50/16
Straight, screw type, PG 9, internal threads	RSC 401/9	–	RSC 501/9	–
Straight, screw type, PG 11, internal threads	RSC 401/11	–	RSC 501/11	–
Straight, screw type, PG 13.5, internal threads	RSC 401/13,5	–	RSC 501/13,5	–
Straight, screw type, PG 16, internal threads	RSC 401/16	–	RSC 501/16	–
Receptacles				
Front mount, with stranded wire, PG 11	RSF 40/11-02	RKF 40/11-02	RSF 50/11-04	RKF 50/11-04
Front mount, with stranded wire, PG 13.5	RSF 40/13,5-02	RKF 40/13,5-02	RSF 50/13,5-04	RKF 50/13,5-04
Single-Ended Cordsets				
Straight, external threads	RS 40-02/*M	RK 40-02/*M	RS 50-04/*M	RK 50-04/*M
Angled, external threads	RSW 40-02/*M	RKW 40-02/*M	RSW 50-04/*M	RKW 50-04/*M
Straight, internal threads	RS 401-02/*M	RK 401-02/*M	RS 501-04/*M	RK 501-04/*M
Angled, internal threads	RSW 401-02/*M	RKW 401-02/*M	RSW 501-04/*M	RKW 501-04/*M
Double-Ended Cordsets				
Straight-to-straight, external threads	RSRK 40-02/* M		RSRK 50-04/* M	
Straight-to-angled, external threads	RSRKW 40-02/* M		RSRKW 50-04/* M	
Angled-to-angled, external threads	RSWRKW 40-02/* M		RSWRKW 50-04/* M	

Blue highlighted product features are available in different variants.

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Rectangular Connectors
ST Series

Rely on the original – market leading for decades

Conforming to IEC 60335, the latest standards for household appliances, the ST Series sets the standard in building automation applications. This makes it an ideal first choice for sun shades and roller blind systems.

The Benefits

Prepared for any weather – especially designed to withstand the challenges of outdoor usages, e.g. rain, ozone and UV radiation

Easy to connect – low installation efforts lead to more ease of use and an efficient work flow

Easy to rely on – ideally suited for ruggedized, moving applications where vibrations and dust are commonplace

Markets

- Building automation
- Machine building
- Automation

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Technical Information

ST Series	3-pole (2 + PE)	4-pole (3 + PE)	5-pole (4 + PE)	6-pole (5 + PE)
General Data				
No. of Pins	2 + PE	3 + PE	4 + PE	5 + PE
Cable-Gland (field attachable)	PG 7	PG 11	Male: M16x1.5 Female: PG 11	PG 11
Cable-Range (field attachable)	ø 4.0 mm to 6.5 mm	ø 6.0 mm to 10.0 mm	ø 6.0 mm to 10.0 mm	ø 8.0 mm to 10.0 mm
Terminal Type (field attachable)	Screw	Screw	Screw	Crimp
Conductor Size (field attachable)	max. 1.5 mm²	max. 1.5 mm²	max. 1.5 mm²	max. 1.0 mm²
Cable Material (molded)	H05RR	H05RR	H05RR	–
Conductor Size (molded)	0.75 mm²	0.75 mm²	0.75 mm²	–
Housing Color	Grey, Black	Grey, Black	Grey, Black	Grey, Black
Electrical Data				
Operating Voltage	230 V AC/DC	400 V AC/230 V DC	400 V AC/230 V DC	400 V AC/230 V DC
Current	Molded: 10 A AC/DC Field attachable: 16 A AC/6 A DC Receptacle: 16 A AC/6 A DC	Molded: 10 A AC/DC Field attachable: 16 A AC/10 A DC Receptacle: 16 A AC/10 A DC	10 A AC/10 A DC	10 A DC/6 A AC
Environmental Data				
Ambient Temperature*	-30 °C to +90 °C	-30 °C to +90 °C	-30 °C to +90 °C	-30 °C to +90 °C
Protection Degree	IP54	IP54	IP54	IP54
Approvals	Molded: VDE Field attachable: VDE, UL, SEV Receptacle: VDE, UL, SEV	Molded: VDE Field attachable: VDE, UL, SEV Receptacle: UL, VDE	Molded: VDE Field attachable: VDE, UL, SEV	VDE, SEV

* Notice derating and cable temperature

Product Configurator

Cordsets

| S | T | A | K | | 3 | | K | | 0 | 7 | 5 | | S | I | | V | 0 | | 2 | M | | G | R | E | Y | |

Gender & Design

STAS = Male cordset, molded, straight
STAK = Female cordset, molded, straight

Pin Assignment

2 = 3-pole (2 + PE)
3 = 4-pole (3 + PE)
4 = 5-pole (4 + PE)

Assembly Design Indicator

K = Molded

Conductor Size

075 = 0.75 mm^2

Safety Clamp (available for STAS)

☐ = Without safety bracket
SI = With safety bracket

Flammability Class

☐ = UL 94 HB
V0 = UL 94-V0

Cable Length

2M = 2 meter
5M = 5 meter   Other cable lengths available upon request.
10M = 10 meter   Please contact: icos-sales@belden.com

Housing Color

GREY = Grey housing
BLACK = Black housing

Field Attachables and Receptacles

| S | T | A | S | | 3 | N | | V | 0 | | G | R | E | Y | |

Gender & Design

STAS = Male connector, field attachable, straight
STASEI = Male connector, receptacle, front mount
STASAP = Male connector, receptacle, panel mount
STAK = Female connector, field attachable, straight
STAKEI = Female connector, receptacle, front mount
STAKAP = Female, receptacle, panel mount

Pin Assignment & Additonal Features

2 = 3-pole (2 + PE)
20 = 3-pole (2 + PE), strain relief
200 = 3-pole (2 + PE), strain relief, coding slot
3 N = 4-pole (3 + PE)
4 N = 5-pole (4 + PE)
5 = 6-pole (5 + PE)

Flammability Class

V0 = UL 94-V0

Housing Color

GREY = Grey housing
BLACK = Black housing

Order Overview

ST Series	3-pole (2 + PE)		4-pole (3 + PE)	
	Male	**Female**	**Male**	**Female**
1. Choose Coding ➝				
↓ **2. Choose Design**				
Field Attachables				
Straight	STAS 2 V0 Grey	STAK 2 V0 Grey	–	–
Straight with strain relief	STAS 20 V0 Grey	STAK 20 V0 Grey	STAS 3 N V0 Grey	STAK 3 N V0 Grey
Straight with strain relief and coding slot	STAS 200 V0 Grey	STAK 200 V0 Grey	–	–
Receptacles				
Panel mount, screw type	STASAP 2 B V0 Grey	STAKAP 2 V0 Grey	STASAP 3 N V0 Grey	STAKAP 3 N V0 Grey
Panel mount, screw type with coding slot	STASAP 200 V0 Grey	STAKAP 200 V0 Grey	–	–
Panel mount, crimp type	–	–	–	–
Front mount with flange, screw type	STASEI 2 V0 Grey	STAKEI 2 V0 Grey	STASEI 3 N V0 Grey	STAKEI 3 N V0 Grey
Front mount with flange, screw type with coding slot	STASEI 200 V0 Grey	STAKEI 200 V0 Grey	–	–
Front mount with flange, crimp type	–	–	–	–
Single-Ended Cordsets				
Straight	–	–	–	STAK 3 K 075 V0 * M Grey
Straight with safety bracket	STAS 2 K 075 SI V0 * M Grey	–	STAS 3 K 075 SI V0 * M Grey	–
Accessories				
Safety bracket	STASI 2		STASI 3	

ST Series	5-pole (4 + PE)		6-pole (5 + PE)	
	Male	**Female**	**Male**	**Female**
1. Choose Coding ➝				
↓ **2. Choose Design**				
Field Attachables				
Straight	–	–	–	–
Straight with strain relief	STAS 4 N V0 Grey	STAK 4 N V0 Grey	STAS 5 V0 Grey	STAK 5 V0 Grey
Straight with strain relief and coding slot	–	–	–	–
Receptacles				
Panel mount, screw type	–	–	–	–
Panel mount, screw type with coding slot	–	–	–	–
Panel mount, crimp type	–	–	STASAP 5 V0 Grey	STAKAP 5 V0 Grey
Front mount with flange, screw type	–	–	–	–
Front mount with flange, screw type with coding slot	–	–	–	–
Front mount with flange, crimp type	–	–	STASEI 5 V0 Grey	STAKEI 5 V0 Grey
Single-Ended Cordsets				
Straight	–	STAK 4 K 075 V0 * M Grey	–	–
Straight with safety bracket	STAS 4 K 075 SI V0 * M Grey	–	–	–
Accessories				
Safety bracket	STASI 4		STASI 3	

Blue highlighted product features are available in different variants. Please see page 28 for more information.

Circular Connectors
M23 Series

A perfect match – Power and Signal transmission in one interfaces

The powerful M23 Series makes it safe and easy to connect actuator/sensor and fieldbus modules. By virtue of their robust features, these connectors are ideal for applications in harsh industrial environments.

The Benefits

Braving any temperature – well-suited for climatic peaks from climate chambers to ovens

Efficient solution – due to fast, multi-pole connection interfaces; ideal for automation applications

Flexible solutions – including straight and angled molded as well as field attachable versions

Markets

- Machine building
- Automation
- Automotive
- Infrastructure

Technical Information

M23 Series	12-pole	19-pole
General Data		
No. of Pins	Molded: 11 + PE Field attachable: 12	Molded: 18 + PE Field attachable: 19
Cable-Gland (field attachable)	PG 13.5	PG 13.5
Cable-Range (field attachable)	ø 10.0 mm to 14.0 mm	ø 10.0 mm to 14.0 mm
Terminal Type (field attachable)	Solder	Solder
Conductor Size (field attachable)	max. 1 mm²	max. 16X1 mm²/3X1.5 mm²
Cable Material (molded)	PUR	PUR
Conductor Size (molded)	8G0.5 mm²/3X1 mm²	16G0.5 mm²/3X1.0 mm²
Housing Color	Field attachable: Silver Molded: Black	Field attachable: Silver Molded: Black
Electrical Data		
Operating Voltage	120 V AC/DC	120 V AC/DC
Current	8 A AC/DC	Field attachable: 16 x 8 A/3 x 10 A AC/DC Molded: 16 x 8 A/3 x 10 A AC/DC
Environmental Data		
Ambient Temperature*	Field attachable: -40 °C to +125 °C Molded: -25 °C to +80 °C	Field attachable: -40 °C to +125 °C Molded: -25 °C to +80 °C
Protection Degree	Field attachable: IP65 Molded: IP67	Field attachable: IP65 Molded: IP67
Approvals	–	–

* Notice derating and cable temperature

Product Configurator

Cordsets

| R | K | U | | 1 | 2 | - | 2 | 5 | 6 | / | 5 | M |

Gender & Design

RSU   = Male cordset, molded, straight
RSUF   = Male cordset, molded, straight, external thread (fixed)
RSWUF   = Male cordset, molded, external thread, 90° angled, external thread (fixed)
RKU   = Female cordset, molded, straight
RKWU   = Female cordset, molded, 90° angled
RKUE   = Female cordset, molded, straight, grounded screw (19-pole only)
RKWUE = Female cordset, molded, 90° angled, grounded screw (19-pole only)

Pin Assignment

12   = 12-pole (11 + PE)
19   = 19-pole (18 + PE)

Cable Style

19-pole version

242   = 16G0.5 mm² + 3X1.0 mm², PUR, Black
S4740   = 16G0.5 mm² + 3X1.0 mm², TPE, Yellow, PLTC

12-pole version

256   = 8G0.5 mm² + 3X1.0 mm², PUR, Black
S4741   = 8G0.5 mm² + 3X1.0 mm², TPE, Yellow, PLTC

X: Without PE   Other cable styles available upon request.
G: With PE   Please contact: icos-sales@belden.com

Cable Length

5M   = 5 meter
10M = 10 meter
15M = 15 meter   Other cable lengths available upon request.
20M = 20 meter   Please contact: icos-sales@belden.com

Field Attachables

| R | K | C | | 1 | 2 | 0 | / | 1 | 3 | , | 5 |

Gender & Design

RSC   = Male connector, field attachable, straight
RSCW   = Male connector, field attachable, 90° angled
RSC-F   = Male connector, field attachable, straight, external thread (fixed)
RKC   = Female connector, field attachable, straight
RKCW   = Female connector, field attachable, 90° angled

Pin Assignment

120 = 12-pole
190 = 19-pole

Cable Gland

13,5 = PG 13.5

Order Overview

M23 Series	12-pole (11 + PE)		19-pole (18 + PE)	
1. Choose Coding →	**Male**	**Female**	**Male**	**Female**
2. Choose Design ↓				
Field Attachables				
Straight PG 13.5	RSC 120/13,5	RKC 120/13,5	RSC 190/13,5	RKC 190/13,5
Straight, external thread (fixed) PG 13.5	RSC-F-120/13,5	–	RSC-F-190/13,5	–
Angled PG 13.5	–	RKCW 120/13,5	RSCW 190/13,5	RKCW 190/13,5
Single-Ended Cordsets				
Straight	RSU 12-256/* M	RKU 12-256/* M	RSU 19-242/* M	RKU 19-242/* M
Straight, external thread (fixed)	RSUF 12-256/* M	–	RSUF 19-242/* M	–
Straight, grounded screw connection	–	–	–	RKUE 19-242/* M
Angled	RSWU 12-256/* M	RKWU 12-256/* M	RSWU 19-242/* M	RKWU 19-242/* M
Angled, external thread (fixed)	RSWUF 12-256/* M	–	RSWUF 19-242/* M	–
Angled, grounded screw connection	–	–	–	RKWUE 19-242/* M
Double-Ended Cordsets				
Straight-to-straight	RSU 12-RKU 12-256/* M		RSU 19-RKU 19-242/* M	
Straight-to-straight (Male with fixed external thread)	RSUF 12-RKU 12-256/* M		RSUF 19-RKU 19-242/* M	
Straight-to-angled	RSU 12-RKWU 12-256/* M		RSU 19-RKWU 19-242/* M	
Straight-to-angled (Male with fixed external thread)	RSUF 12-RKWU 12-256/* M		RSUF 19-RKWU 19-242/* M	
Angled-to-angled	RSWU 12-RKWU 12-256/* M		RSWU 19-RKWU 19-242/* M	
Accessories				
Spanner (for field attachable version)	ZMS 19			
Safety cab (for external thread version)	ZVK 2			

Blue highlighted product features are available in different variants. Please see page 32 for more information.

Circular Connectors
Mini Power Series*

Full power ahead – for your industrial automation processes

With the Mini Power connectivity and power solution, you can easily set up, maintain or expand your system, while maximizing uptime in harsh conditions.

The Benefits

Maximum output – enabling the transmission of up to 30 A per contact

Long-distance power – works in environments with wet or dry areas or extreme temperatures

Time-saving – ready-to-install already terminated cordsets and connectors

Markets

• Machine building
• Automation
• Transportation
• Automotive

*only available in the US

We reserve the right to make technical changes. EMEA +49 (0) 7127/14-1809 | beldensolutions.com ■ US 1-855-400-9071 | belden.com

Technical Information

Mini Power Series	A-Size 3-pole	A-Size 4-pole	D-Size 3-pole	D-Size 4-pole
General Data				
No. of Pins	3 (2 + PE)	4 (3 + PE)	3 (2 + PE)	4 (3 + PE)
Cable-Gland (field attachable)	–	–	–	–
Cable-Range (field attachable)	–	–	–	–
Terminal Type (field attachable)	–	–	–	–
Conductor Size (field attachable)	–	–	–	–
Cable Material (molded)	TPE	TPE	TPE	TPE
Conductor Size (molded)	14 AWG	14 AWG	10 AWG	10 AWG
Housing Color	Black, Red	Black	Black, Red	Black
Electrical Data				
Operating Voltage	600 V AC/DC	600 V AC/DC	600 V AC/DC	600 V AC/DC
Current	18 A AC/DC	15 A AC/DC	30 A AC/DC	25 A AC/DC
Environmental Data				
Ambient Temperature*	-30 °C to +90 °C	-30 °C to +90 °C	-30 °C to +90 °C	-30 °C to +90 °C
Protection Degree	IP67, IP68	IP67, IP68	IP67, IP68	IP67, IP68
Approvals	UL	UL	UL	UL

* Notice derating and cable temperature

Product Configurator

Cordsets

| R | S | P | A | 3 | - | 8 | 0 | 2 | / | 5 | M | - | |

Gender & Design

RSP   = Male cordset, 1 3/8", molded, straight
RSPA   = Male cordset, 7/8", molded, straight
RSWP   = Male cordset, 1 3/8", molded, 90° angled
RSWPA = Male cordset, 7/8", molded, 90° angled
RKP   = Female cordset, 1 3/8", molded, straight
RKPA   = Female cordset, 7/8", molded, straight
RKWP   = Female cordset, 1 3/8", molded, 90° angled
RKWPA = Female cordset, 7/8", molded, 90° angled

Pin Assignment

3   = 3-pole (2 + PE)
4   = 4-pole (3 + PE)

Cable Style

D-Size = 1 3/8"		A-Size = 7/8"			
800	= 3G10 AWG, TPE, Black	**802**	= 3G14 AWG, TPE, Black	Other cable styles available upon request.	
803	= 4G10 AWG, TPE, Black	805	= 4G14 AWG, TPE, Black	Please contact: icos-sales@belden.com	

Cable Length

0.5M	= 0.5 meter	20M	= 20 meter	
5M	= 5 meter	30M	= 30 meter	Other cable lengths available upon request.
10M	= 10 meter	50M	= 50 meter	Please contact: icos-sales@belden.com

Housing Color

☐   = Black housing
R   = Red housing

Receptacles

| R | S | F | P | 3 | - | 1 | / | 2 | N | P | T | - | 8 | 0 | 0 | / | 0 | . | 5 | M |

Gender & Design

RSFP   = Male cordset, 1 3/8", molded, straight
RSFPA   = Male cordset, 7/8", molded, straight
RKFP   = Female cordset, 1 3/8", molded, straight
RKPFA   = Female cordset, 7/8", molded, straight

Pin Assignment

3   = 3-pole (2 + PE)
4   = 4-pole (3 + PE)

Thread Size

1/2 NPT = 1/2 NPT thread
3/4 NPT = 3/4 NPT thread (1 3/8" only)

Cable Style

D-Size = 1 3/8"

800   = 3G10 AWG, TPE, Black
803   = 4G10 AWG, TPE, Black

A-Size = 7/8"

802	= 3G14 AWG, TPE, Black	Other cable styles available upon request.
805	= 4G14 AWG, TPE, Black	Please contact: icos-sales@belden.com

Cable Length

0.5M	= 0.5 meter	
1M	= 1 meter	Other cable lengths available upon request.
3M	= 3 meter	Please contact: icos-sales@belden.com

Order Overview

Mini Power Series	D-Size 3-pole (2 + PE)		D-Size 4-pole (3 + PE)	
	Male	**Female**	**Male**	**Female**
1. Choose Coding ➡ **2. Choose Design** ⬇				
Receptacles				
Front mount 1/2 NPTF	RSFP 3-1/2NPT-800/*M	RKFP 3-1/2NPT-800/*M	RSFP 4-1/2NPT-803/*M	RKFP 4-1/2NPT-803/*M
Front mount 3/4 NPTF	RSFP 3-3/4NPT-800/*M	RKFP 3-3/4NPT-800/*M	RSFP 4-3/4NPT-803/*M	RKFP 4-3/4NPT-803/*M
Single-Ended Cordsets				
Straight	RSP 3-800/*M	RKP 3-800/*M	RSP 4-803/*M	RKP 4-803/*M
Angled	RSWP 3-800/*M	RKWP 3-800/*M	RSWP 4-803/*M	RKWP 4-803/*M
Double-Ended Cordsets				
Straight-to-straight	RSP 3-RKP 3-800/*M		RSP 4-RKP 4-803/*M	
Straight-to-angled	RSP 3-RKWP 3-800/*M		RSP 4-RKWP 4-803/*M	
Angled-to-straight	RSWP 3-RKP 3-800/*M		RSWP 4-RKP 4-803/*M	
Angled-to-angled	RSWP 3-RKWP 3-800/*M		RSWP 4-RKWP 4-803/*M	
Straight-to-Straight D-to-A-Size	RSP 3-RKPA 3-802/*M		RSP 4-RRKPA 4-805/*M	
Accessories				
Drop Tee Male-Female-Female	TAP-P 3 (-R)		TAP-P 4	
D-to-A-Size Reducer	RSP 3-RKPA 3 (-R)		RSP 4-RKPA 4	
Reducing Drop Tee Male-Female-Female	TAP-PA 3 (-R)		TAP-PA 4	
Reducing Cable Drop Tee Male-Female-Female	TAP-PA 3-802/*M (-R)		TAP-PA 4-804/*M	

Mini Power Series	A-Size 3-pole (2 + PE)		A-Size 4-pole (3 + PE)	
	Male	**Female**	**Male**	**Female**
1. Choose Coding ➡ **2. Choose Design** ⬇				
Receptacles				
Front mount 1/2 NPTF	RSFPA 3-1/2NPT-802/*M	RKFPA 3-1/2NPT-802/*M	RSFPA 4-1/2NPT-805/*M	RKFPA 4-1/2NPT-805/*M
Front mount 3/4 NPTF	–	–	–	–
Single-Ended Cordsets				
Straight	RSPA 3-802/*M	RKPA 3-802/*M	RSPA 4-805/*M	RKPA 4-805/*M
Angled	RSWPA 3-802/*M	RKWPA 3-802/*M	RSWPA 4-805/*M	RKWPA 4-805/*M
Double-Ended Cordsets				
Straight-to-straight	RSPA 3-RKPA 3-802/*M		RSPA 4-RKPA 4-805/*M	
Straight-to-angled	RSPA 3-RKWPA 3-802/*M		RSPA 4-RKWPA 4-805/*M	
Angled-to-straight	RSWPA 3-RKPA 3-802/*M		RSWPA 4-RKPA 4-805/*M	
Angled-to-angled	RSWPA 3-RKWPA 3-802/*M		RSWPA 4-RKWPA 4-805/*M	
Straight-to-Straight D-to-A-Size	RSP 3-RKPA 3-802/*M		RSP 4-RKPA 4-805/*M	
Accessories				
Drop Tee Male-Female-Female	TAP-A 3 (-R)		TAP-A 4	
D-to-A-Size Reducer	RSP 3-RKPA 3 (-R)		RSP 4-RKPA 4	
Reducing Drop Tee Male-Female-Female	TAP-PA 3 (-R)		TAP-PA 4	
Reducing Cable Drop Tee Male-Female-Female	TAP-PA 3-802/*M (-R)		TAP-PA 4-804/*M	

Blue highlighted product features are available in different variants.

The Connectivity Center

When it comes to automation technologies, we are the experts for quality connectors and wiring components. With an extensive Hirschmann Industrial Connector and Lumberg Automation Connectivity product portfolio, we can offer you a wide range of standard solutions.

Require a specialized solution that does not yet exist or have a problem with your current solution?

Then you simply get in touch with our Connectivity Center: the platform for custom-made solutions developed specifically for your needs. By combining all of our knowledge and internal resources, we will deliver the exact solution you need to smooth out your production process, warrant continuity and reduce Total Cost of Ownership.

Economical connectivity solutions off the shelf and custom-made

The Best Solutions … Fast!

With a dedicated team of experts, we can meet even the most demanding deadlines and technical challenges. Every month, the Connectivity Center delivers approximately 100 customized solutions for customers worldwide. Some within just two weeks, hardly ever longer than three months. All solutions are guaranteed to have outstanding compact design, chemical resistance as well as high mechanical and electrical loading capacity.

Max 3 months

Belden Connectivity Center

Combined Strength of Three Belden Brands

Belden is a leader in the design, manufacture, and marketing of signal transmission products for data networking and a wide range of industrial connectivity products. Whenever necessary we combine the strength of all three powerful Belden brands: Belden, Hirschmann and Lumberg Automation.


Pushing Technology, Meeting Standards

insights trends developments

As a globally active technology leader we can translate the latest trends, insights and developments into custom-fit solutions that give you the competitive advantage you are looking for. Thanks to extensive prototyping and intensive testing in our own facilities, you can be sure national and international standards are met. You can put our solutions straight to work.

Add Value to Your Business

You can be certain we provide signal transmission solutions that make your company operate faster, better, longer, safer and more economically. It's our ambition to deliver all these benefits to you from a single source, building a lasting relationship that adds value to your business.

Add Security

Add Economy

Add Efficiency

Add Time

Add Innovation
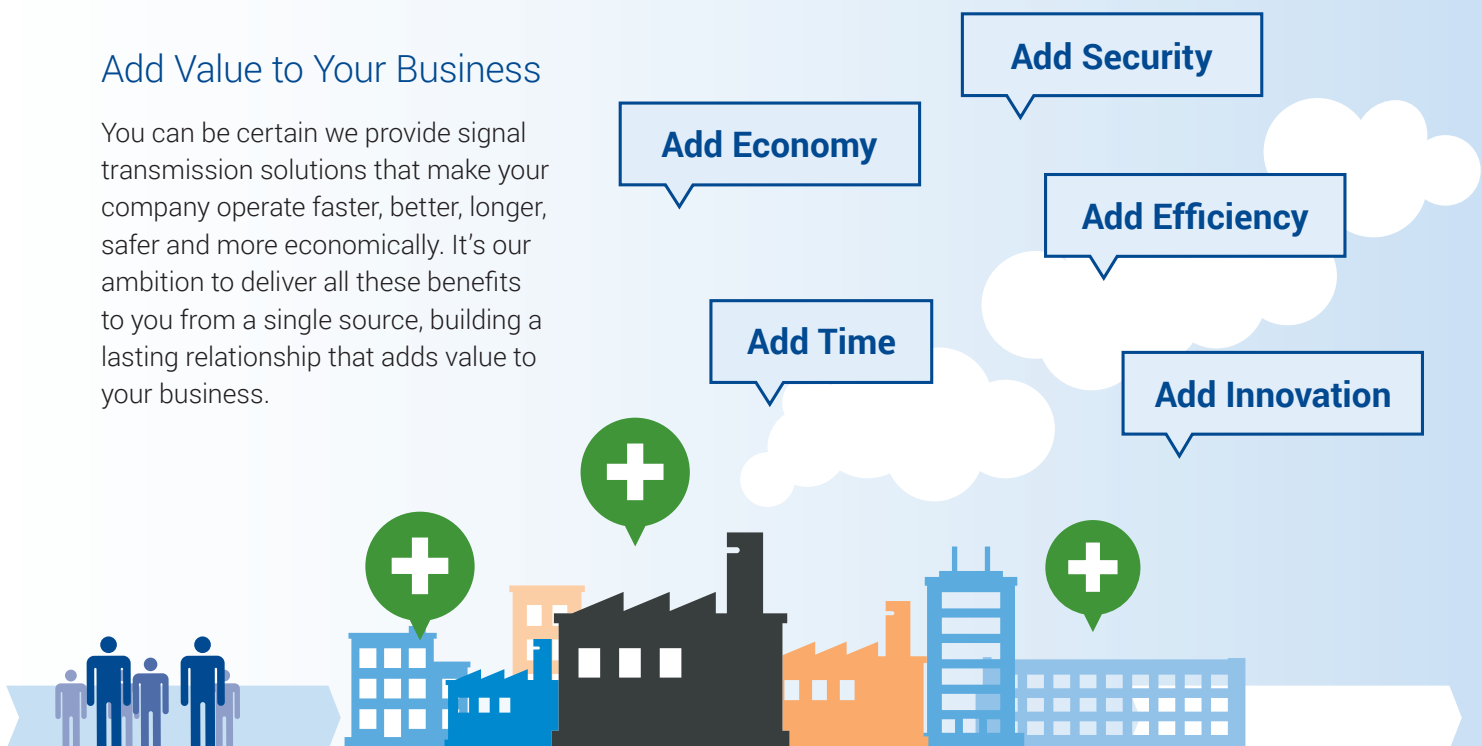
About Belden

Belden Inc., a global leader in high quality, end-to-end signal transmission solutions, delivers a comprehensive product portfolio designed to meet the mission-critical network infrastructure needs of industrial, enterprise and broadcast markets. With innovative solutions targeted at reliable and secure transmission of rapidly growing amounts of data, audio and video needed for today's applications, Belden is at the center of the global transformation to a connected world. Founded in 1902, the company is headquartered in St. Louis, USA, and has manufacturing capabilities in North and South America, Europe and Asia.

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